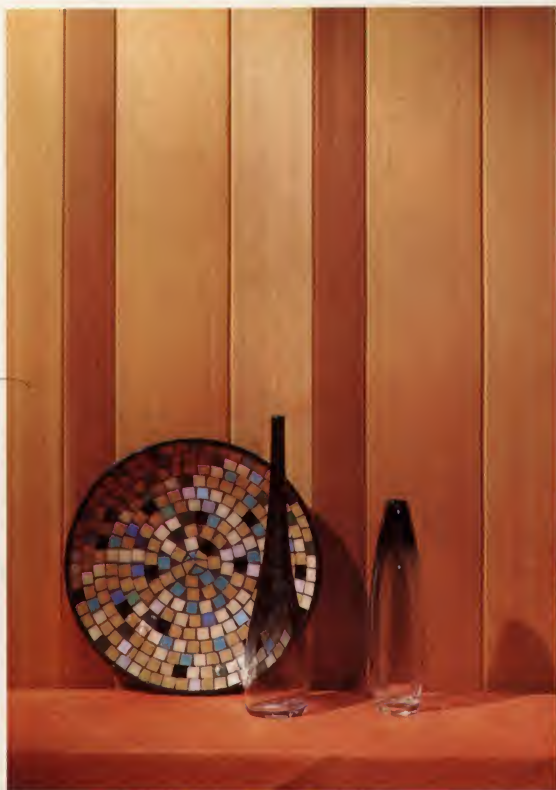


PANELING PATTERNS AND FINISHES

A.I.A. FILE NO: 19-D



Somewhat more formal than the flat grain paneling (right), is the same random width selection with all vertical grain. Panels are 4, 6, and 8 inches wide providing an endless variety of possible effects. Paneling has been finished with a coat of clear sealer and subsequent coats of clear lacquer to preserve its natural color and beauty. This finish is recommended for interiors only.

Specification:

Finish: Clear Sealer and Clear Lacquer.
Pattern: T&G, Vee Joint, Random Width, Vertical Grain.
Grade: B & BTR.



A semi-transparent (penetrating) stain has been used to enhance the natural beauty of this paneling. Notice that it tints the color of the smooth surface without covering the grain. A wide variety of semi-transparent stains are commercially available. They are easy to apply and easily maintained. Most can be used inside and outside.

Specification:

Finish: Semi-transparent Stain.
Pattern: 1 x 4 T&G, Vee Joint, Smooth side out.
Grade: B & BTR.

This random width, flat grain, interior paneling has been finished with a clear stain wax to protect it from surface dirt and discoloration. Stain waxes help protect the natural beauty of Western Red Cedar and are extremely easy to apply. They are recommended for interior use only and for walls that are not subjected to hard use. A good quality paste will add another measure of protection.

Specification:

Finish: Stain Wax.
Pattern: T&G Random width, Flat Grain, Vee Joint.
Grade: B & BTR.



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WESTERN RED CEDAR

PANELING PATTERNS AND FINISHES

Informality is the keynote when the rough textured, center matched surface is exposed. In this case the paneling has been finished with a single coat of semi-transparent stain. Nearly all standard Western Red Cedar tongue and groove patterns have a smooth *and* rough textured side. The textured side will retain stains twice as long as the smooth side and also take scuffs and bruises with considerable grace.

Specification:

Finish: Semi-transparent stain.
Pattern: T&G, Center Matched, Resawn Face.
Grade: B & BTR.

This textured paneling is 1" x 8" tongue and groove with an edge vee on the resawn face. It has been finished with a semi-transparent stain. Both finish and texture serve as a constant reminder of the beauty and flexibility that belongs to wood alone—and especially to Western Red Cedar. An exterior wall paneled with this pattern stands up exceptionally well to the weather and is easily cared for.

Specification:

Finish: Semi-transparent stain.
Pattern: T&G, Edge Vee, Resawn face.
Grade: B & BTR.



Deep shadow lines and beautiful grain are the chief characteristics of Channel pattern. Color and grain variations create interest and patterns that cannot be duplicated by non-wood materials. Rough textured Channel is especially well suited for exterior use with a stained finish. This smooth surfaced Channel has been finished with a clear sealer and varnish for interior use only.

Specification:

Finish: Clear sealer and varnish.
Pattern: Clear Channel.
Grade: B & BTR.

Here is another example of a semi-transparent stain on Channel. Note that while the pattern is the same, this panel features vertical grain for an entirely different effect.



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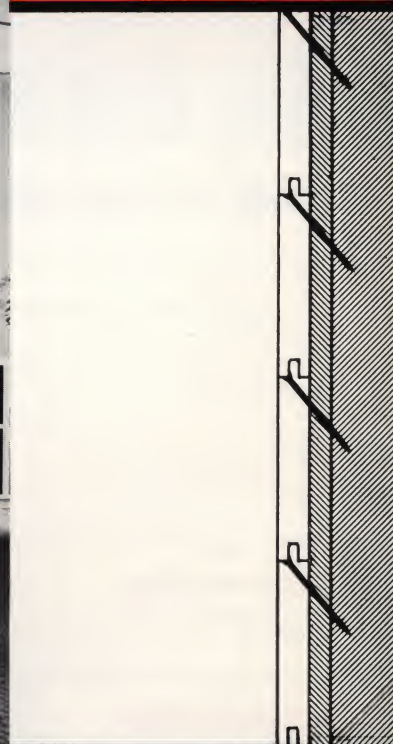
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II-1-61

WESTERN RED CEDAR

TONGUE
AND
GROOVE

A.I.A. FILE NO. 19-D



Western Red Cedar Tongue and Groove Paneling is basic, time-tested and versatile. Its name is taken from the contour machined into the edges of each piece which enables two or more boards to interlock precisely when applied to a wall. As an exterior siding, Tongue and Groove boards virtually "weatherproof" the structure to which they are applied. Many variations of the basic pattern are available enabling it to meet a host of building requirements. It is at home any place outside as well as inside. It is used for SIDINGS, PANELINGS, SOFFITS, FENCING, GABLE ENDS, GARDEN HOUSES, CEILINGS, WAINSCOTS AND CABINETS . . . to name a few. Its ease of application, its great natural beauty (and superb ability to take stains and other finishes) . . . its adaptability . . . all combine to make it an especially versatile pattern for the architect, builder and home owner.



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WESTERN RED CEDAR

TONGUE AND GROOVE

GRADES*

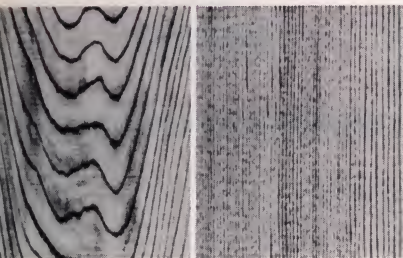
"B AND BTR"—PANELING Paneling of this grade is recommended where the *finest* appearance is important. Pieces of this grade are of sound, *all heart* wood. This is also an excellent grade for natural, stained or enameled finishes.

"C"—PANELING Paneling of this grade is recommended for use where appearance is important. Pieces of this grade are of sound, *all heart* wood and will exhibit some appearance characteristics that cause them to be graded only slightly lower than "B & BTR." This is also an excellent grade for natural, stained or enameled finishes.

"D"—PANELING Paneling for this grade is recommended for use where excellent serviceability is required, but appearance is not of primary importance. Pieces of this grade are only slightly lower than "C" grade.

FLAT GRAIN (FG)




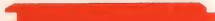



VERTICAL GRAIN (VG)



TYPICAL PATTERN VARIATIONS OF WESTERN RED CEDAR TONGUE AND GROOVE PANELINGS

AVAILABLE IN THE FOLLOWING SIZES

NOMINAL	ACTUAL	NOMINAL	ACTUAL
1/2" x 4"	7/16" x 3 1/2"	1" x 4"	3/4" x 3 1/2"
1/2" x 5"	7/16" x 4 1/2"	1" x 5"	3/4" x 4 1/2"
1/2" x 6"	7/16" x 5 1/2"	1" x 6"	3/4" x 5 1/2"
1/2" x 8"	7/16" x 7 1/2"	1" x 8"	3/4" x 7 1/2"
1" x 10"		1" x 10"	3/4" x 9 1/2"

PATTERN	SPECIFICATION**	EXPLANATION
	1/2" NOMINAL	7/16" ACTUAL
FACE  BACK	T & G, S1S, EV1S, Resawn Back side	Tongue & Groove, Surfaced one side, Edge Vee one side, Resawn Back side.
	1" NOMINAL	3/4" ACTUAL
FACE  BACK	T & G, S2S, CM	Tongue & Groove, Surfaced two sides and Center matched.
FACE  BACK	T & G, S2S, EV1S or, (T & G—VJ)	Tongue & Groove, Surfaced two sides, Edge Vee one side. (Tongue & Groove—Vee Joint)
FACE  BACK	T & G, S1S, EV1S (Faceside) Rough—Mill sawn—Back side	Tongue & Groove, Surfaced one side (face side), Edge Vee one side. Rough Mill sawn—Back side.
FACE  BACK	T & G, Resawn & CM Face side. S1S, EV1S on Back side	Tongue & Groove, Resawn and Center matched Face side. Surfaced one side and Edge Vee one side on Back side.
FACE  BACK	T & G, CM Resawn Face, S1S and CM Back side	Tongue & Groove, Center matched on Resawn Face, surfaced one side and Center Matched back side.
FACE  BACK	T & G, EV Resawn Face S1S & CM—Back side	Tongue & Groove, Edge Vee on Resawn Face. Surfaced one side and Center match back side.

COMMONLY USED TONGUE AND GROOVE ABBREVIATIONS:

WRC: Western Red Cedar
B & BTR: B and Better
C: Cee
D: Dee
VG: Vertical Grain
MG: Mixed Grain
FG: Flat Grain
KD: Kiln Dried
T & G: Tongue and Groove

CM: Center Matched (flush
joint when joined)
VJ: Vee Joint (Vee formed
when joined)
S1S: Surfaced one side
S2S: Surfaced two sides
EV1S: Edge Vee one side
EV2S: Edge Vee two sides
RGH: Rough

Resawn: Fine band saw resawn
R/L: Random Length
R/W: Random Width
BDL: Bundle
DET: Double end trimmed
V: Vee
E: Edge
WRCLA: Western Red Cedar
Lumber Association

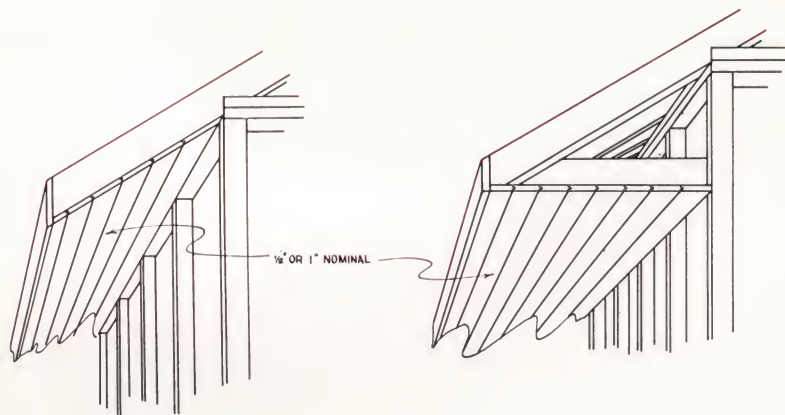
*For more information on kiln drying, grain and texture, see WRCLA I-2-61, "Grades & Specifications."

**Designation of Grade and Grain are required to complete specification.

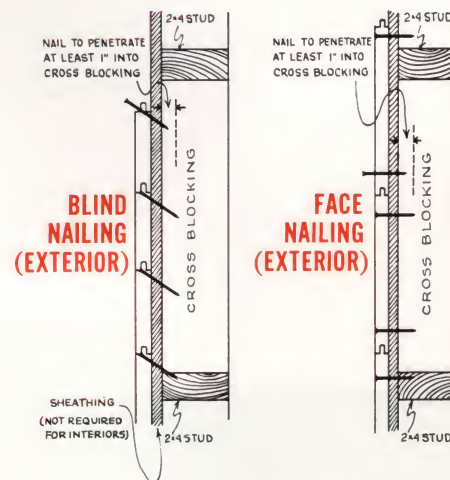
LUMBER ASSOCIATION



TONGUE AND GROOVE

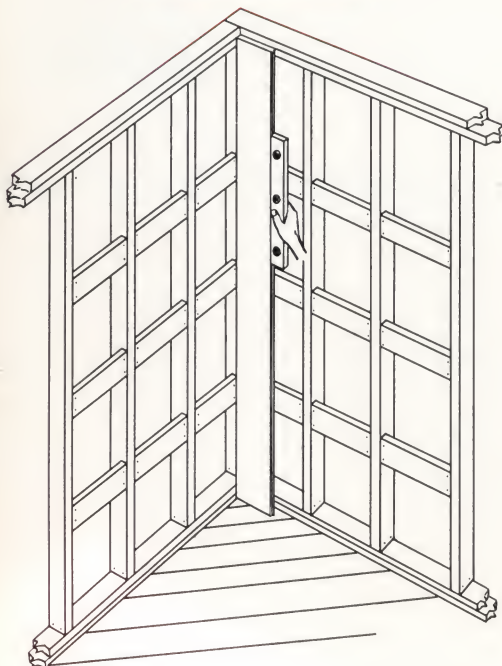


SOFFITS—Western Red Cedar Tongue and Groove strengthens and lengthens the lines of soffits. Its light weight make it easy to handle (for one man application). Its dimensional stability guards against wavers and bows.

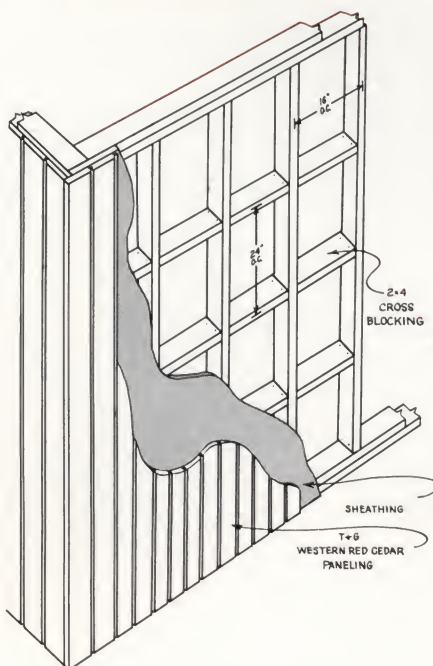


NAILING—Blind nail all widths up to (and including) 6". Nail head is covered by groove of adjacent board for neat, tailored appearance. Face nail widths that exceed 8 inches. For further information, see WRCLA I-4-61, "Nails & Nailing."

STARTING 1st COURSE



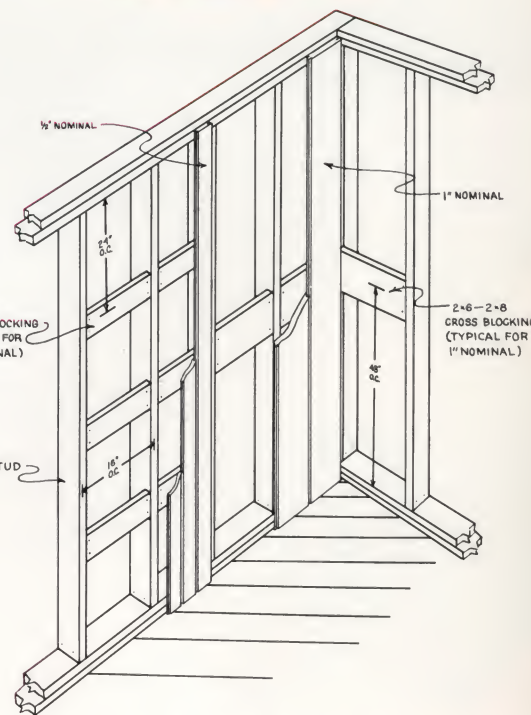
EXTERIOR APPLICATION



ALIGN FIRST COURSE WITH CARE—As manufactured by WRCLA mills, Tongue and Groove will align itself accurately after the first board is positioned. Don't rely on the adjacent wall (at corner) to be perfectly plumb. A spare moment spent with the first board will speed up the job later.

CHECK LOCAL BUILDING CODES—Type and thickness of sheathing for exterior walls may vary the requirements for cross blocking. Use only non-corrosive nails for exteriors. Staggered cross blocking goes in faster but is recommended only if boards are blind nailed.

INTERIOR APPLICATION



INTERIOR CROSS BLOCKING—It is often good technique to turn cross blocking so that face is exposed for greater bearing surface. This provides more nailing surface and (usually) permits passage of electrical wiring without having to drill passage ways through cross blocking. Note that sheathing is not required.



WESTERN RED CEDAR

TONGUE AND GROOVE

TO COVER 100 SQUARE FEET OF WALL WITH TONGUE AND GROOVE PANELING*

PATTERN SIZE	1" x 4" 1/2" x 4"	1" x 6" 1/2" x 6"	1" x 8" 1/2" x 8"	1" x 10" 1/2" x 10"	1" x 12"
SQUARE FEET OF LUMBER SURFACE	124	115	111	110	108
LINEAL FEET	370	230	166	130	108

*Table applies to Tongue & Groove boards with 1/4" tongue only and does not allow for end trim loss (usually 3 - 7%).



APPLICATION GUIDE FOR TONGUE AND GROOVE*

	EXTERIOR WALL & GABLE ENDS	INTERIOR WALLS	SOFFITS	CEILINGS	WAINSCOTS	FENCING
THICKNESS	3/4" (1" nominal)	1/2" nominal 1" nominal	1/2" nom. 1" nom.	1/2" nom. 1" nom.	1/2" nom. 1" nom.	1/2" nom. 1" nom.
BEARING SURFACE SPACING (FOR NAILING)	24" O.C. max. (FHA)	24" O.C. max. for 1/2" nom. 48" O.C. max. for 1" nom.	24" O.C. max. (FHA)	24" O.C. max.	24" O.C. max. for 1/2" nom. 48" O.C. max. for 3/4" nom.	Same as wainscots
NAILING TYPE/TECHNIQUE*	Non-corrosive. Blind nail 6" and wider. Face nail 8" and wider. (Must penetrate cross blocking, or stud by 1")	1/2"—6d finish. 3/4"—6d finish. Blind nail 6" and narrower. Face nail 8" and wider.	Same as ext. walls	Same as int. walls	Same as int. walls	Same as ext. walls

*See application diagram page 3. Also WRCLA I-4-61, "Nails & Nailing."



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WESTERN RED CEDAR LUMBER ASSOCIATION

GROWN-IN DURABILITY... LIFE-TIME FINISH

It is unnecessary to spend money solely for the preservation of Western Red Cedar. Nature has already done the job by providing the giant tree with "grown in" preservatives. Many an untreated cedar shelter, erected by our early-day pioneers, has withstood the ravages of weather for over a century and a half with no evidence of deterioration whatever. So finishing (staining, painting, bleaching) Western Red Cedar is simply a matter of decoration. Left untreated, the wood will eventually weather to a soft "driftwood" gray. But since the progress of such weathering is time consuming and difficult to control uniformly, WRCLA recommends that a manufactured finishing treatment be used for both interiors and exteriors of Western Red Cedar.

CLEAR STAIN WAX—Clear stain waxes produce a clear finish that reveals the grain, color and texture of Western Red Cedar. They are designed for interior use only to protect the surface from airborne dirt and smudging. They are easily applied and maintained. Stain wax surfaces are frequently further protected with a good quality paste-wax.

PIGMENTED STAIN WAX—Pigmented stain waxes are just like clear stain waxes except they are pigmented. Shade and tonal variations may be obtained by extending the time between application and wiping.

SEMI-TRANSPARENT STAIN—Sometimes called penetrating stains, these stains, while pigmented, allow the grain and texture of Western Red Cedar to show through. They penetrate deeply into the wood and are formulated for exterior use although they may also be used inside. They are offered in a wide range of colors, are easily applied and easily maintained.

VARNISH—Varnish is recommended for interior use only. It provides a smooth and durable clear film for walls that may be exposed to above average amounts of moisture and airborne dirt. Varnish is not recommended for wide-spread exterior use because of the requirement for frequent refinishing which is both costly and time-consuming.

HEAVY BODIED STAIN—These stains form a non-gloss, opaque finish that will not crack, blister or peel. They hide the grain and color of Western Red Cedar but not the surface texture. They are easily applied with one coat being sufficient in certain colors. Richly pigmented, they are offered in a wide range of colors.

BLEACHING AGENTS—Bleaches may be used to turn Western Red Cedar to a soft, silver gray prematurely by bleaching the wood's natural colorant without otherwise changing its composition. They do exactly the same thing in a year that it takes nature many years to accomplish—and with greater control. They are recommended for exteriors and are easily applied.

WATER REPELLENTS—Water repellent treatment greatly improves the lasting quality of surface coatings on wood, as it prevents exterior water from traveling into the wall. However, such treatment should not be considered as a substitute for a finish coat. A penetrating type water repellent, protects the wood by coating the individual cells which makes the surface water repellent and minimizes cupping and grain raising. To be effective, water repellents are recommended for "back priming" all Western Red Cedar that is used for exteriors. In the case of factory paint-prime-coated Western Red Cedar bevel siding, the back side is treated with a water repellent at the factory. Unprimed bevel siding, and all other patterns are also available with a water repellent treatment on all sides. Water repellents can be applied in the field quite simply by brushing or dipping.

FINISHING

A.I.A. FILE NO. 19-D



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WESTERN RED CEDAR LUMBER ASSOCIATION



WESTERN RED CEDAR

FINISHING

PAINT—Few, if any, wood or non-wood materials can challenge Western Red Cedar's paintability. This has been born out through extensive research.* For exterior use, the new and improved blister-resistant paints are highly recommended and produce outstanding results provided the manufacturer's instructions are strictly observed.

CAUTION: For exterior use, buy only those paints which use the words "Blister Proof" or "Blister Resistant" as part of the trade name or on the label—or give assurance that the paint is blister resistant in connection with the instructions.

ABILITY TO PAINT

	"SPREADING RATE" SQUARE FEET PER GALLON		FILM HARDENING TIME "DRY THROUGH HOURS"	
	PRIMER (3)	TOP (4)	PRIMER	TOP
WESTERN RED CEDAR	563	578	9	19
ALUMINUM	Painting over weathered enamel unsatisfactory			
SOFTBOARD	433	535	over 24	18
HARDBOARD	441	560	9	23
ASBESTOS CEMENT	—	—	—	—

*"Grouping of Softwoods for Exterior Painting"—Table 42, U. S. Wood Handbook.

Also research performed by Paint Research Laboratories of Harlan Associates, on which the following table is based:

SOME POPULAR WESTERN RED CEDAR FINISHES



*

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DESIRED EFFECT	TYPE OF FINISH	HOW APPLIED	PRIMER	EXTERIOR OR INTERIOR	NO. OF COATS
Clear finish. Grain shows through.	Clear stain wax	Brush Dip Roller Spray	Not req.	Int. only	One
Semi-transparent color. Grain softened, less distinct.	Pigmented stain wax	Brush Dip Roller Spray	Not req.	Int. only	One
Beauty enhanced with subtle coloration but grain is not hidden.	Semi-trans. stain.	Brush Dip Roller	Not req.	Both	Int.—1 Ext.—2
Clear finish with a degree of surface protection. Smooth.	Varnish	Brush	Clear sealer	Interior only recommended. Ext. use requires frequent replacement.	2 preferred
Soft, rustic colors. Durable, opaque finish.	Heavy bodied stain.	Brush Dip Roller Spray	Not req.	Primarily for exteriors.	Dark colors—1 Light colors—2
Permanent, soft, silver gray. (Driftwood)	Bleaching agents	Brush	Not req.	Exterior	1 initially, 2nd in 6 mos.
Durable, opaque finish.	Blister resistant paint.	Brush Roller Spray	Oil base. Also self priming.	Both	New wood—2 Repaint—1
Durable, opaque finish.	Paint	Brush Roller Spray	Alkyd base. Also self priming.	Int. only.	1 or 2

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WESTERN RED CEDAR



PANELING
INTERIOR AND EXTERIOR

A.I.A. FILE NO. 19-D

Western Red Cedar panelings are as unique as the towering and majestic trees from which they are sawn. All Western Red Cedar panelings come from the heartwood of the tree. This heartwood, which comprises all but an extremely narrow portion of the entire tree, is famous for its exceptional physical properties. Durability, dimensional stability, close, even grain and extraordinary resistance to decay are typical of these properties which the Western Red Cedar tree passes on to any and all lumber taken from it.

Add to these Western Red Cedar's richness, its warmth, its natural beauty and it's easy to see why it continues to appear in the specifications for a great deal of today's highest quality light construction.

A wall paneled in Western Red Cedar paneling imparts a rich texture and solidness that cannot be duplicated.



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GENUINE...SOLID...RICH

No other softwood has Western Red Cedar's richness . . . of color, warmth and texture. Few other softwoods can challenge its great physical properties either.

Western Red Cedar paneling, wherever it's used, is a thing of lasting beauty. Its solid depth, its beautiful grain . . . even its fragrance . . . create a warm environment of unmatched quality.



Here a continuation of beautiful ceiling paneling to the soffit creates an extremely pleasing effect. A broad roof overhang becomes a most impressive feature when lined with Western Red Cedar.
Grade: "B & Btr."
Pattern: Tongue & Groove, Center Matched.
Grain: Mixed.
Size: $\frac{1}{2}$ " x 4".
Finish: Semi-transparent Stain.



Early American bedroom gets a big boost through the use of clear cedar. Molding, shelves and cabinets also Western Red Cedar.
Grade: "B & Btr."
Pattern: Tongue and Groove, "V" Joint.
Grain: Vertical.
Size: 1" x 8".
Finish: Stain Wax.



Materials used in modern post and beam structures must be selected with care. They must be structurally sound and look good too. Here Western Red Cedar roof decking is left exposed for warmth and beauty.
 Grade: "B & Btr."
 Pattern: Double Tongue and Groove, "V" Joint.
 Grain: Vertical Grain.
 Finish: Semi-transparent stain.



The entry to this home is enhanced by the deep vertical shadow lines of "Clear Channel."
 Grade: "B and Btr."
 Pattern: Channel.
 Size: 1" x 8".
 Finish: Heavy Bodied Stain.



Western Red Cedar paneling brings texture and warmth to this contemporary living room. End wall paneling is reversed to show off its resawn, textured face.
 Grade: "B & Btr."
 Pattern: Tongue and Groove.
 Grain: Vertical Grain.
 Sizes: End wall—1" x 10", Fine Resawn Face
 Ceiling—1" x 6", Surfaced.
 Finish: Semi-transparent stain.



PANELING
INTERIOR AND EXTERIOR

WESTERN RED CEDAR

DESIGN VERSATILITY

MANY PATTERNS—The combined member mills of the Western Red Cedar Lumber Association are able to offer an extensive and complete variety of paneling patterns. Within this pattern complex there is an even greater variety of widths and thicknesses so that there are virtually no design niches into which a Western Red Cedar paneling pattern cannot fit.

GRAIN VARIETY—Like a fingerprint, Western Red Cedar's beautiful grain can't be duplicated—it is hand crafted by nature. Although most paneling is shipped with mixed grain, vertical grain or flat grain may be specified.

EXTERIOR—INTERIOR—Known chemicals provide every piece of Western Red Cedar paneling with grown in decay resistance. For this reason, each panel is equally at home inside or outside.

NATURAL BEAUTY—Of all the world's woods, Western Red Cedar is among the most beautiful. Its warm color blends with any color scheme. Its grain and texture simply can't be mimicked. Its solid feeling of depth lasts forever.

PHYSICAL PROPERTIES

KILN DRIED—Assurance of a host of desirable physical attributes results from the fact that all WRCLA mills ship their paneling kiln dried. (K.D.)

DURABILITY—The U.S. Forest Service classifies Western Red Cedar in the group of three softwoods displaying the highest resistance to decay.

DIMENSIONAL STABILITY—Western Red Cedar panelings stay put! No need to worry about expansion, contraction, swelling and shrinking and consequent warping. Stability is of great importance to the quality of any exterior or interior paneling job and Western Red Cedar is the most stable of *all* American conifers. It is the lowest in volumetric shrinkage of any of the commercial softwoods.*

INSULATION—One inch of Western Red Cedar equals six inches of brick or 15 inches of concrete or sandstone in insulation value. According to the U. S. Forest Products Laboratory, Western Red Cedar has the highest insulating value of all commercial softwoods*—a money saving factor in reducing heating and cooling costs.

FINISHING—Western Red Cedar's ability to take and hold paints and stains has been extensively tested by both the U. S. Forest Products Laboratory and by WRCLA. Its performance is unsurpassed in this category too.

* U. S. Wood Handbook.



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WESTERN RED CEDAR



**CHANNEL
PATTERN**
ROUGH OR SMOOTH FACE

A.I.A. FILE NO. 19-D

Clear Channel, in Western Red Cedar, is an exceptionally versatile pattern. Its deep-shadow channel stands as a constant reminder that, "This is solid cedar." While it gives the impression of "board-on-board" or "board-on-batten," it is a much simpler and more economical pattern to use.

Its channel is an integral part of the pattern to which each board is milled. For this reason, Channel is self-aligning, easily and quickly applied. Like all Western Red Cedar, it finishes beautifully and is often used as much inside the home as outside.

GRADES—Channel pattern is graded the same as Western Red Cedar Paneling—"B & BTR," "C" and "D".*

GRAIN—Normally shipped with mixed grain (MG), flat grain (FG) or vertical grain (VG) may be specified.

APPLICATION—Interior and exterior application techniques for Channel are virtually the same as those for 1" Tongue and Groove. For recommendations on cross blocking and other factors, consult WRCLA II-1-61, "Tongue & Groove."

NAILING—Channel should be face nailed. For widths up to 6", one nail per bearing is adequate while two nails should be used for widths exceeding 8". Do not nail through the overlapping joint! This prevents the small (but necessary) amount of expansion and contraction that must be allowed for. Also see WRCLA I-4-61, "Nails & Nailing."

*See WRCLA I-2-61, "Grades & Specifications," or WRCLA II-1-61, "Tongue & Groove."



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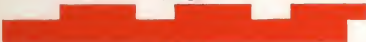

WESTERN RED CEDAR

CHANNEL PATTERN ROUGH OR SMOOTH FACE

PATTERN VARIATIONS AND SIZES AVAILABLE IN THE FOLLOWING SIZES

PATTERN	SPECIFICATION	NOMINAL	ACTUAL
		1" x 6" 1" x 8" 1" x 10"	3/4" x 5 1/2" 3/4" x 7 1/2" 3/4" x 9 1/2"
FACE  BACK	S/L (Channel), S2S, EVIS (back).		Shiplap (Channel), with a Vee Joint back. When reversed it becomes Vee Joint paneling.
FACE  BACK	S/L (Channel), S2S		Shiplap (Channel), Surfaced two sides.
FACE  BACK	S/L (Channel), Fine bandsaw resawn face.		Shiplap (Channel), the face is finely textured with a fine resaw. In most instances the back will be surfaced.

POSSIBLE VARIATIONS

FACE  BACK	A number of additional effects are possible through modification of the basic channel pattern. However, since specific dimensions will vary with different over all widths, it is necessary to consult the supplier and/or manufacturer for full particulars.
FACE  BACK	
FACE  BACK	

CLEAR CHANNEL COVERAGE ESTIMATOR*

TO COVER 100 SQ. FT. (F.S.M. OR PER SQ.)				
Nominal width (in.)	1 x 6	1 x 8	1 x 10	1 x 12
Surface measure Square ft. (F.S.M.)	120	115	112	110
Lineal measure (ft.)	240	172	134	110

*Table applies to Channel pattern boards with 1/2" lap only and does not allow for end trim loss (usually 3 - 7%).



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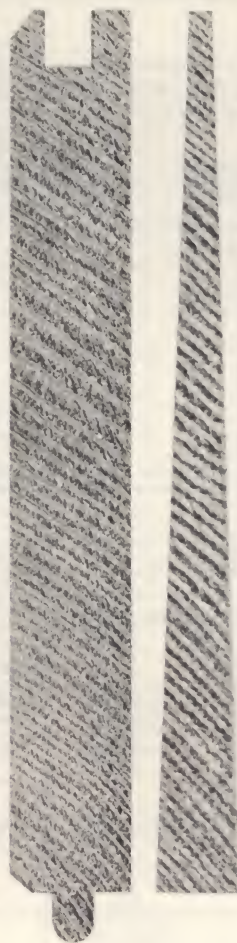
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WESTERN RED CEDAR



ALL YOU NEED TO KNOW TO DESIGN BETTER, BUILD BETTER WITH **WESTERN RED CEDAR**... THE STERLING OF WOODS

PREFACE The Western Red Cedar Lumber Association was formed by the progressive manufacturers in this industry to serve as a reliable source of information regarding this excellent wood, its many uses and applications. The Association's continued research includes such areas as promotion of blister resistant paints, minimum application costs, the performance of Cedar versus competitive sidings and mill primed sidings in addition to general improvement of the industry's standards and the uses of quality Western Red Cedar.

USES OF WESTERN RED CEDAR Western Red Cedar is a wood particularly adapted to meet exacting requirements of the architect. It is highly regarded for all exterior uses, such as (1) siding and exterior trim, (2) millwork, (3) fencing and garden structures—for interior purposes (1) paneling and woodwork, (2) architectural millwork.

PROPERTIES DURABILITY The wood contains a natural preservative which renders its heartwood highly resistant to decay, termites and gives it extreme durability without artificial preservative treatment. The U. S. Forest Service classifies Western Red Cedar in the group of three softwoods displaying the highest resistance to

decay. **DIMENSIONAL STABILITY** Western Red Cedar shows the lowest volumetric shrinkage of any of the domestic species, hard or soft. With this lowest shrinkage factor Western Red Cedar is highly practical wood for exterior and interior applications where expansion, contraction, swelling and shrinkage and the consequent warping must be at a minimum such as with siding and paneling and other interior uses. **INSULATION** Western Red Cedar being a wood of very low density and fine closed cellular structure, provides an excellent barrier to the transfer of heat. **WEATHER RESISTANCE** Western Red Cedar enjoys the highest rating for its resistance to weather checks; and its freedom from any tendencies to cup and pull loose from fastenings when exposed to the weather. **WORKING QUALITIES** Western Red Cedar is grouped by the Forest Products Laboratory as being one of the softwood species which is the most easy to work with handtools. It is grouped in the highest rating of woods which glue very easily using different glues under a wide range of gluing conditions. By test of an outside agency, Western Red Cedar proved to be more resistant to splitting than other species normally used for similar purposes. **WEIGHT** Western Red Cedar is of exceptionally light weight—one of the lightest of all commercial species.

COMPARATIVE PROPERTIES OF WESTERN RED CEDAR AND OTHER WOODS

Species	Decay Resistance of Heartwoods * (page 45)	Wood on which Weather checks Are (page 43)	Woods that cup and pull loose from fastenings when exposed to weather (page 44)	Working Qualities of Wood (page 62)	Volumetric shrinkage dried to 6% MC (page 315)	Density (lbs/cubic foot)	Insulation Value thermal resistance of the material ** (page 47)	Painting: Woods on which paint of the widest range in kind and quality give good service (page 358)
Western Red Cedar	High	Inconspicuous	Slight	Easy to work	5.4%	23	1.56	Group 1
Bald Cypress	High	Inconspicuous	Slight	Relatively easy to work	8.4%	33	1.33	Group 1
Redwood	High	Inconspicuous	Slight	Relatively easy to work	5.4%	29	1.35	Group 1
Western Hemlock	Moderate to low	Conspicuous	Distinct	Relatively easy to work	9.5%	30	1.27	Group 3
Southern Yellow Pine	Moderate to low	Conspicuous	Distinct	Least easy to work	9.8%	36-44	1.07	Group 4

*Page references refer to Wood Handbook NO-72-1955 Forest Products—U. S. Dept. of Agriculture

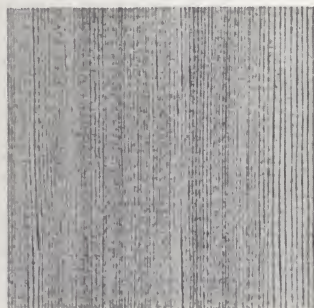
** Oven Dried

COMPARATIVE PROPERTIES OF WESTERN RED CEDAR AND OTHER BUILDING MATERIALS

For Commercial Siding as Used						Ability to Paint			
	Insulation Value—Thermal resistance of the material (5)	Dimensions	Load at rupture in bending Pounds (1)	Load to produce 1/10 inch deflection in bending Pounds	Density (lbs/cubic foot)	"Spreading Rate" Square feet per gallon		Film Hardening Time "Dry through hours"	
						Primer (3)	Top (4)	Primer	Top
Western Red Cedar	1.56	3/4" x 8"	(bevel siding) 460	(bevel siding) 57	22 (2)	563	578	9	19
Aluminum	.0007	9-3/4" wide bevel	69	25	163	Painting over weathered enamel unsatisfactory			
Softboard	2.0	.47" thick	not determined	not determined	35	433	535	over 24	18
Hardboard	.7	1/4" x 12"	248	15	65	441	560	9	23
Asbestos Cement	.25	5/32" x 12"	26	11	124	—	—	—	—

- (1) From a study of an outside agency.
- (2) 8% moisture content.
- (3) Fed. spec. TTP-25-A.
- (4) Fed. spec. TTP-102.
- (5) Oven dried.

CHARACTERISTICS Western Red Cedar is one of the lightest of all commercial species, and a renowned characteristic is its high percentage of heartwood and its extraordinary resistance to decay. **COLOR** The heartwood of Western Red Cedar is reddish brown (varies from deep reddish brown to a light yellowish brown). The sapwood is narrow, often not over one inch in width. **TEXTURE** Western Red Cedar has a fine texture with even, straight, narrow summer wood rings. It is very easily worked, can be finished to a smooth, silky surface with little effort, is completely free from pitch. **GRAIN** Vertical Grain Western Red Cedar Lumber shows a very uniform pattern, with just enough contrast in color between spring and summer wood to be pleasing. The flat grain of the species is very decorative and highly suited for interior paneling.



Vertical Grain.



Flat Grain.



GRADES

BEVEL SIDING

Western Red Cedar Bevel Siding is produced by resawing kiln dried surfaced lumber on a bevel to produce two pieces thicker on one edge than the other. It is most commonly used as exterior siding giving a horizontal shadow line effect. Except for siding intended for rough side use, bevel siding is graded on the surfaced side.

CLEAR V. G. ALL HEART BEVEL SIDING Siding of this grade is intended for use where highest quality is demanded. The exposed width is all heartwood and free from imperfections, and presents a vertical grain appearance for $\frac{3}{4}$ the width from the thick edge. Specific information, see par. 408-aa, rules #15, West Coast Lumbermen's Inspection Bureau.

"A" BEVEL SIDING Siding of this grade is intended for use where good appearance is desired. It is usable full length without waste and may be mixed grain (MG). Specific information, see par. 408-a, rules #15, West Coast Lumbermen's Inspection Bureau.

"B" BEVEL SIDING An economical, quality paint grade. Siding of this grade may be mixed grain (MG) and may contain minor imperfections and occasional cutouts in longer pieces. Specific information, see par. 408-b, rules #15, West Coast Lumbermen's Inspection Bureau.

"RUSTIC" BEVEL SIDING Siding of this grade is recommended for use as sidewall covering where the distinctive charm of a rustic appearance is desired. It is usable full length without waste and may be mixed grain (MG). Pieces are graded from the resawn side which may contain occasional minor imperfections. The thick edge may be rough or surfaced. Specific information, see par. 408-bb, rules #15, West Coast Lumbermen's Inspection Bureau.

"C" BEVEL SIDING Siding of this grade is suitable for temporary construction, buildings having minimum shelter requirements, and various industrial uses. Pieces of this grade have one or more characteristics which are of such size or number that the piece is not of a higher grade. Lengths are random, with no specified percentages. Specific information, see par. 308-c, rules #15, West Coast Lumbermen's Inspection Bureau.

PANELING

Western Red Cedar paneling is noted for its beauty and fine finishing qualities. It is shipped kiln dried (KD). If vertical or flat grain only is desired, it must be specified—otherwise mixed grain (MG) may be shipped at shipper's option.

"B AND BETTER" PANELING Paneling of this grade is recommended for natural, stain or paint finishes where the finest appearance is important. Pieces of this grade are of sound, all-heart wood. Specific information, see par. 411-b, rules #15, West Coast Lumbermen's Inspection Bureau.

"C" PANELING Paneling of this grade is recommended for natural, stain or paint finishes where good appearance is important. This grade may contain very minor imperfections. It is often used in conjunction with "B and Better" Paneling. Specific information, see par. 411-c, rules #15, West Coast Lumbermen's Inspection Bureau.

"D" PANELING Paneling of this grade is recommended for use where excellent serviceability is required but appearance is not of primary importance. Specific information, see par. 411-d, rules #15, West Coast Lumbermen's Inspection Bureau.

FINISH

Finish is surfaced 4 sides (S4S) and is shipped kiln dried (KD). If vertical or flat grain only is desired, it must be specified—otherwise mixed grain (MG) may be shipped at shipper's option.

"B AND BETTER" FINISH Finish of this grade is recommended and widely used for interior and exterior trim and cabinet work with natural, stain or paint finishes where finest appearance is important. Pieces of this grade are of sound wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics. Specific information, see par. 402-b, rules #15, West Coast Lumbermen's Inspection Bureau.

"C" FINISH Finish of this grade is recommended for interior and exterior trim and cabinet work with natural, stain or paint finishes where good appearance is important. It is often used in conjunction with "B and Better" Finish. Specific information, see par. 402-c, rules #15, West Coast Lumbermen's Inspection Bureau.

"D" FINISH Finish of this grade is recommended for interior and exterior trim and cabinet work where good serviceability is required but appearance is not of primary importance. Specific information, see par. 402-d, rules #15, West Coast Lumbermen's Inspection Bureau.

3/4" Beveled Rabbetted Siding

1/2" 5/8" 3/4" Bevel Siding

Depth of rabbet is thickness of thin edge, and width is 1/2".

SIZES:

NOMINAL

ACTUAL

TOP

BOTTOM

WIDTH

1/2 x 4

3/16

15/32

3-1/2

1/2 x 5

3/16

15/32

4-1/2

1/2 x 6

3/16

15/32

5-1/2

1/2 x 8

3/16

15/32

7-1/2

5/8 x 8

3/16

9/16

7-1/2

5/8 x 10

3/16

9/16

9-1/2

3/4 x 8

3/16

3/4

7-1/2

3/4 x 10

3/16

3/4




9-1/2

3/4 x 12

3/16

3/4

11-1/2

			SIZES:	
			NOMINAL	ACTUAL
 1" Tongue and Groove, V-Joint Paneling—KD (T&G CM V1S S2S)	 1/2" Tongue and Groove, V-Joint, Resawn Back Paneling—KD (T&G CM V1S S1S)	 1" Tongue and Groove, Resawn Face, V-Joint Paneling—KD (T&G CM V1S S1S)	1 x 4	3/4 x 3-1/2
			1 x 6	3/4 x 5-1/2
			1 x 8	3/4 x 7-1/4
			1 x 10	3/4 x 9-1/4
			1/2 x 4	7/16 x 3-1/2
			1/2 x 6	7/16 x 5-1/2
			1/2 x 8	7/16 x 7-1/4

SIZES:			
NOMINAL	ACTUAL (\$4S)	NOMINAL	ACTUAL (\$4S)
1 x 2	3/4 x 1-5/8	1-1/4 x 2	1-1/16 x 1-5/8
1 x 3	3/4 x 2-5/8	1-1/4 x 3	1-1/16 x 2-5/8
1 x 4	3/4 x 3-1/2	1-1/4 x 4	1-1/16 x 3-1/2
1 x 5	3/4 x 4-1/2	1-1/4 x 5	1-1/16 x 4-1/2
1 x 6	3/4 x 5-1/2	1-1/4 x 6	1-1/16 x 5-1/2
1 x 8	3/4 x 7-1/4	1-1/4 x 8	1-1/16 x 7-1/4
1 x 10	3/4 x 9-1/4	1-1/4 x 10	1-1/16 x 9-1/4
1 x 12	3/4 x 11-1/4	1-1/4 x 12	1-1/16 x 11-1/4

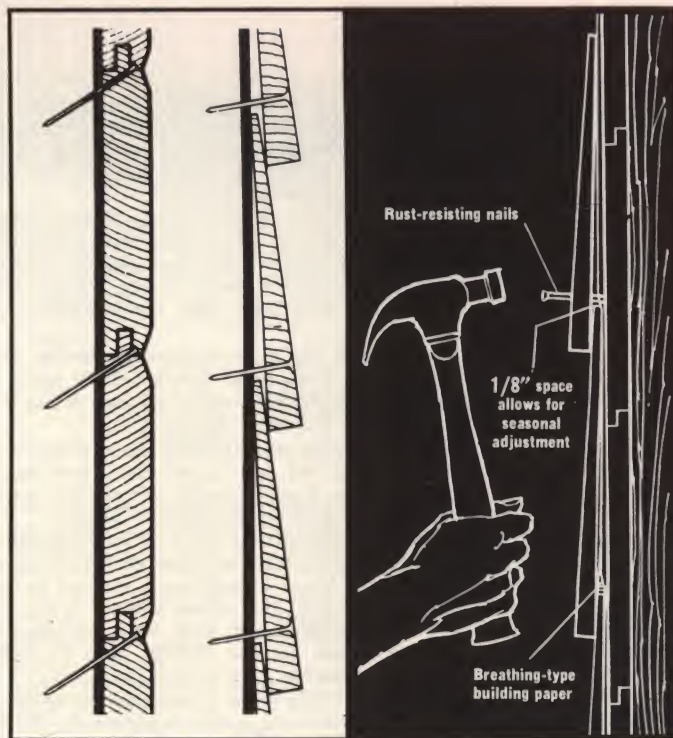
APPLICATION

FASTENING METHODS For exterior installation one should use a corrosion resistant fastener such as hot-dipped galvanized or aluminum nails. For dry interior work no special fasteners are required, nails may be driven flush or countersunk. If a natural finish is desired, such as for interior work, a non-oily wood filler (to fill countersunk nail holes) should be used to avoid oil stains.

NAILING BEVEL SIDING: Two types of nails are commonly used with siding; one having a small head and the other a slightly larger head. The small head casing nail is set (driven with a nail set) about 1/16 inch below the face of the siding. The hole is filled with putty after the prime coat of paint is applied. The large head nail is driven flush with the face of the siding with the head being covered later with paint. Nailing should be snug, not too tight. This prevents cupping. For **rabbetted siding**, nail is driven 1" above thick edge of siding. (6D for 4" and 6"; 8D for 8", 10" and 12".) For **regular beveled siding**, the nail should be driven 1/8" above the thin edge of the underlying piece. See Diagram. (6D for 4" and 6"; 8D for 8" and over.) FHA minimum lap required: 1".

TONGUE AND GROOVE: 1" NOMINAL—interior or exterior 6" and narrower, blind nail through tongue. One 6D finish nail per bearing (blocking strip spaced 48" OC) or face nail one 8D finish nail per bearing. 8" and wider are face nailed with two 8D nails per bearing.

TONGUE AND GROOVE: 1/2" NOMINAL—for interior use 6" and narrower, blind nail through tongue one 4D finish nail per bearing (blocking strip spaced 24" OC) or faced nail with one 6D finish nail per bearing 8" and wider are face nailed with two 6D finish nail per bearing.



EXTERIOR FINISHES

STAINS Semi-Transparent (penetrating) stains are to be found in an extremely wide range of architectural colors. Their semi-transparency allows the full beauty of cedar's grain to show through. Penetrating deeply, they become part of the wood itself. For this reason, they should be used only on new wood or for restaining surfaces of the same color. **Application:** Best applied by brush. **Number of Coats:** Two coats for exteriors; one for interiors. **Coverage:** Consult manufacturer's specifications. **Heavy Bodied** stains are richly pigmented providing an excellent and durable opaque finish. They are available in a wide range of tones and colors. They do not crack, peel or blister and last up to twice as long when applied to the textured, or rough-sawn side of the board. **Application:** May be brushed, sprayed or dipped. **Number of Coats:** Dark colors—one coat; light colors—may require two.

CLEAR GLOSSY FINISHES While they permit the rich beauty of Western Cedar to remain visible, the clear glossy finishes are the most difficult to apply and maintain. These finishes are predominantly varnishes or log oils; they should be applied when the cedar is new and clean. The log oils have a marked tendency to erode away while the varnishes tend to peel and crack. Subsequent refinishing (usually necessary annually) demands that the previous film be completely removed before application of the new coat.

INTERIOR FINISHES

When the true beauty of Western Cedar showing the color and grain is desired, apply a clear finish with clear lacquers, varnishes and clear waxes of which there are many. Use as recommended by the manufacturer.

BLEACHES Currently available are bleaching agents (or weathering agents) which, when applied to new cedar, turn the wood to a soft silver gray, or driftwood color, although untreated Western Cedar will eventually weather to this color of its own accord. However bleaching agents will hasten the process and prevent interim darkening before the final color is achieved. **Application:** Should be brushed. **Number of Coats:** One coat when new. An additional coat in 3 to 5 years.

PAINTS Research has proven the superior paintability of Western Cedar. New wood should be covered to a 4 mil thickness (FHA Minimum Property Standards) in either two or three coats. The new and improved blister-resistant paints are highly recommended and produce outstanding results provided the manufacturer's instructions are strictly observed. Be certain that the primer is compatible with the finishing formula to insure best results.



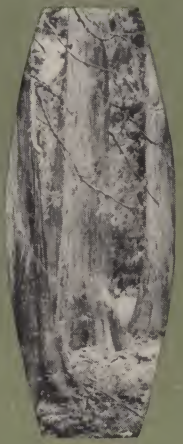
ALOHA LUMBER CORP., Box 2067, Seattle 11, Washington	BRITISH COLUMBIA FOREST PRODUCTS LTD., 995 West 6th Ave., Vancouver 9, B.C.	FLAVELLE
CEDAR, Murray St., Port Moody, B.C.	LAMFORD CEDAR LTD., P.O. Box 638, New Westminster, B.C.	MacMILLAN, BLOEDEL, POWELL RIVER LTD.,
1199 W. Pender St., Vancouver 1, B.C.	E. C. MILLER CEDAR LUMBER CO., P.O. Box 1080, Aberdeen, Washington	NALOS LUMBER LTD., Foot of Smithe St.,
Vancouver 3, B.C.	NORWOOD LUMBER CO. LTD., 635 Taylor St., Vancouver 3, B.C.	RAYONIER CANADA SALES LTD., 1111 W. Georgia, Vancouver 5, B.C.
SEATTLE CEDAR LUMBER MFG. CO., 4703 Ballard Ave., Seattle 7, Washington	WEYERHAEUSER COMPANY, P.O. Box 1645, Tacoma 1, Washington	

For additional technical information, write: **WESTERN RED CEDAR LUMBER ASSOCIATION** 4403 White-Henry-Stuart Building, Seattle 1, Washington

AIA FILE NO. 19-A-1

Western Red Cedar Lumber

*grades
and uses*



AIA FILE NO. 19-A-1

WEST COAST LUMBERMEN'S ASSOCIATION
1410 S. W. MORRISON STREET • PORTLAND 5, OREGON

Properties of Western Red Cedar

THE FORESTS

Western red cedar is among the largest and finest cedars grown anywhere in the world. A distinct species technically known as *Thuja plicata*, it is found at its prime in the abundant moisture areas west of the Cascade mountains. It grows throughout Pacific Coast forests from Alaska to northern California, usually mingled with stands of Douglas fir, West Coast hemlock and Sitka spruce.

A typical full-grown cedar will reach a height of 150 to 175 feet and a diameter of 5 to 8 feet. Leaves of the Western red cedar are small, light-green on top and dark green on the underside, forming flat, spray-like branches. Seeds of the Western red cedar are double-winged. They come from the tree's half-inch, dark brown cones.

More than 5 million acres of tax-paying forests are already certified as West Coast Tree Farms, pledged to a continuous program of growth, protection and scientific management of forest crops. The natural regenerative characteristics of Western red cedar, coupled with wise forest practices, give full assurance that there will be a permanent supply of this useful timber to meet all foreseeable needs.

THE LUMBER

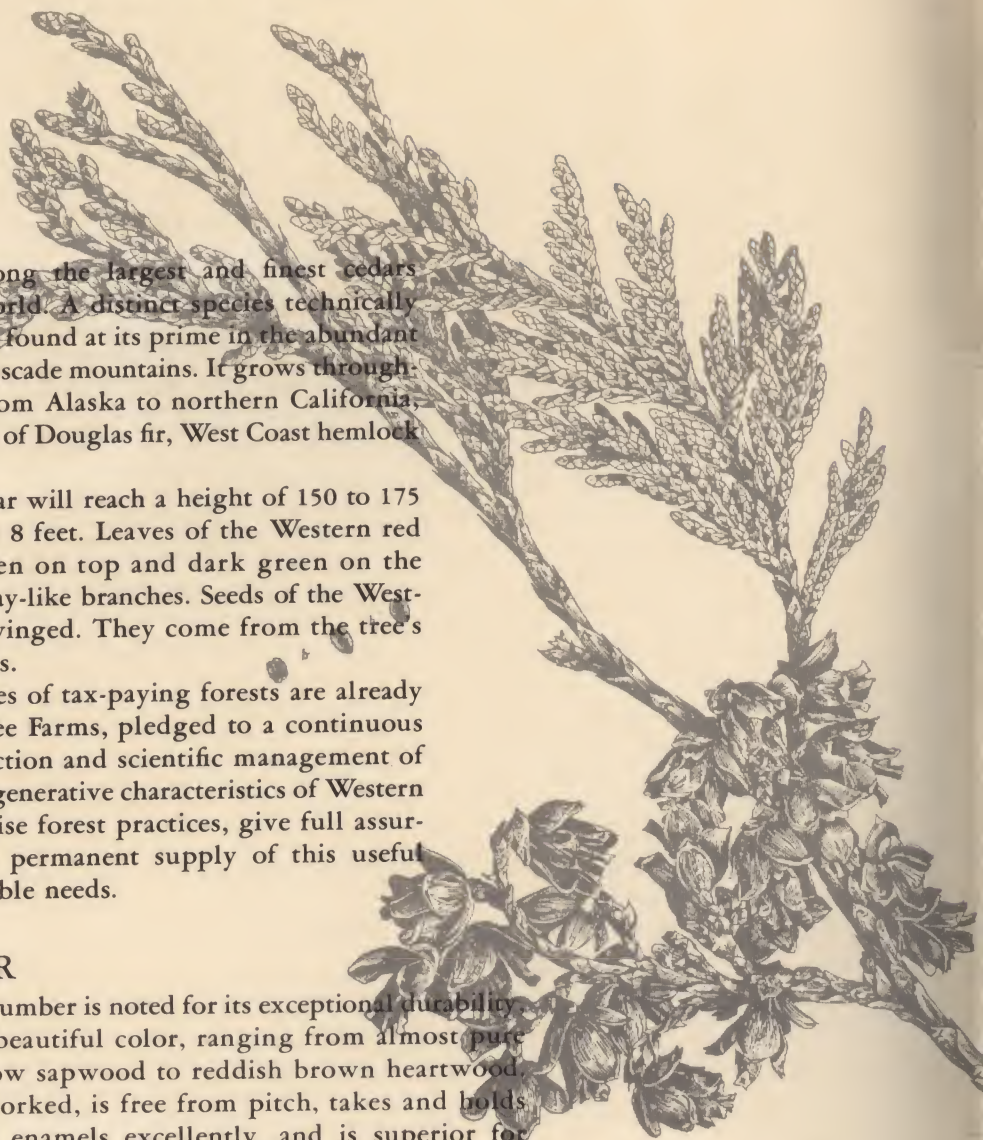
Western red cedar lumber is noted for its exceptional durability, light weight and beautiful color, ranging from almost pure white of the narrow sapwood to reddish brown heartwood. It is very easily worked, is free from pitch, takes and holds stains, paints and enamels excellently, and is superior for gluing. Because of these qualities, Western red cedar is especially adaptable for use as bevel siding for quality homes.

DURABILITY

Western red cedar is one of the most durable species known. Its heartwood is highly resistant to decay, and can be counted on for long and worthy service where conditions favoring decay prevail.

WEATHERING CHARACTERISTICS

Left exposed without paint or other protective finishes, Western red cedar weathers to an intriguing gray color having little or no sheen. It is one of the most stable species of lumber, having very little tendency to cup and pull loose from fastenings when exposed to the weather.





INSULATING QUALITIES

Western red cedar is a very good insulating material—another plus value in its use as bevel siding. It has been assigned a coefficient of heat transmission or *k* value of .74 BTU per inch of net thickness at 12% moisture content.

WEIGHT

Weight of Western red cedar varies due to density and moisture content. It is one of the lightest commercial softwoods known, averaging about 23 pounds per cubic foot when dried to the moisture content it reaches in service.

DIMENSIONAL STABILITY

Like all lumber, Western red cedar is hygroscopic and will pick up or discharge moisture until it is in equilibrium with the surrounding atmosphere. Compared with the average of other lumber species, Western red cedar has very good dimensional stability which again increases its desirability as bevel siding.

GLUING PROPERTIES

Western red cedar is in the top group of species for ease of gluing. It glues very readily with different types of adhesive under a wide range of gluing conditions, and, as glued material, finds many industrial uses.

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All grade stamps shown are registered
U. S. Patent Office.

Western Red Cedar Bevel Siding

Western red cedar Bevel Siding is lumber which has been surfaced four sides and then resawn on a bevel to produce two pieces thicker on one edge than the other. It is customarily shipped kiln dried (KD) as closely as practicable to an average moisture content of 10% to 12%.

BEVEL SIDING GRADES

There are five regular grades of Western red cedar Bevel Siding: "Clear", "A", "B", "Rustic" and "C".



"CLEAR" BEVEL SIDING

Siding of this grade is designed for use where perfection is demanded. It is well milled on face and edges, making a smooth surface usable full length without waste. 6" and wider siding is vertical grain (VG) for $\frac{3}{4}$ the width or more from thick edge. Page 8 shows an example of "Clear" Bevel Siding.



"A" BEVEL SIDING

Siding of this grade is selected for use where exceptionally fine appearance is desired. It is usable full length without waste and may be mixed grain (MG). Page 9 shows an example of "A" Bevel Siding.



"B" BEVEL SIDING

Appearance closely approaching that of the higher grades is often achieved with siding of this grade, which contains slightly more characteristics and some cutouts in longer pieces. Craftsmen of even moderate skill find it easy to apply. It may be mixed grain (MG). Page 10 shows an example of "B" Bevel Siding.



"RUSTIC" BEVEL SIDING

Siding of this grade is recommended for use as sidewall covering where the distinctive charm of a rustic appearance is desired. Pieces are graded from the resawn side. Thick edge may be rough or surfaced. Lengths are random, with a minimum of 30% of the footage 8' and longer. Page 11 shows an example of "Rustic" Bevel Siding.



"C" BEVEL SIDING

Pieces of this grade have one or more characteristics which are of such size or number that the piece is not of a higher grade. Lengths are random, with no specified percentages.



Western Red Cedar Bevel Siding

NEW BUNDLING: Standard bundles are 6' and up. $\frac{1}{2}$ " x 4" stock is bundled 12 layers to bundle, and in bundles 10' and longer four layers of 3' to 7' lengths may be included. Other $\frac{1}{2}$ " stock and $\frac{5}{8}$ " stock is bundled 10 layers to bundle. In bundles 10' and longer, three layers of 3' to 7' lengths may be included in each bundle. $\frac{3}{4}$ " stock is bundled 6 layers to the bundle. In bundles 10' and longer, two layers of 3' to 7' lengths may be included in each bundle.

OLD BUNDLING: Standard bundles are 3' and up. $\frac{1}{2}$ " x 4" stock is bundled 12 layers to bundle. Other $\frac{1}{2}$ " stock and $\frac{5}{8}$ " stock is bundled 10 layers to bundle. $\frac{3}{4}$ " stock is bundled 6 layers to bundle. A maximum of 33 $\frac{1}{3}$ % of the footage may be in 3' to 7' bundles in random length loading.

BEVEL SIDING APPLICATION: Bevel Siding should be nailed at each stud with one rust-resistant siding nail or casing nail per course, placed as shown in the illustration at right. Nails should be about $\frac{1}{8}$ " above top edge of preceding course to allow for possible dimension changes resulting from variations in the moisture content of the surrounding air. Nails should not be driven further than necessary to hold siding snug. 6d nails for 4", 5" and 6" siding and 8d for 8", 10" and 12" siding are recommended.



BEVEL SIDING

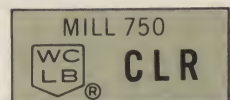
SIZES				CONVERSION TABLE
NOMINAL	ACTUAL			
	Top	Bottom	Width	
1/2 x 4	3/16	15/32	3-1/2	1600 FBM per 1000 Square feet (1" lap)
1/2 x 5	3/16	15/32	4-1/2	1429 FBM per 1000 Square feet (1" lap)
1/2 x 6	3/16	15/32	5-1/2	1333 FBM per 1000 Square feet (1" lap)
1/2 x 8	3/16	15/32	7-1/2	1280 FBM per 1000 Square feet (1 1/4" lap)
5/8 x 8	3/16	9/16	7-1/2	1280 FBM per 1000 Square feet (1 1/4" lap)
5/8 x 10	3/16	9/16	9-1/2	1212 FBM per 1000 Square feet (1 1/4" lap)
3/4 x 8	3/16	3/4	7-1/2	1280 FBM per 1000 Square feet (1 1/4" lap)
3/4 x 10	3/16	3/4	9-1/2	1212 FBM per 1000 Square feet (1 1/4" lap)
3/4 x 12	3/16	3/4	11-1/2	1171 FBM per 1000 Square feet (1 1/4" lap)

(Figures do not allow for waste in cutting)

Rabbeted Bevel Siding is a special item which is popular in some areas. It is customarily manufactured in $\frac{3}{4}$ " by 6", 8" and 10" widths, and is suitable for application directly over studs. Depth of the rabbet conforms to thickness of thin edge, and width of rabbet is $\frac{1}{2}$ ".

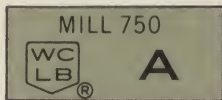


AN EXAMPLE OF



"CLEAR"
WESTERN
RED CEDAR
BEVEL
SIDING

AN
EXAMPLE
OF



"A"
WESTERN RED CEDAR
BEVEL SIDING

AN EXAMPLE OF



"B"
WESTERN
RED CEDAR
BEVEL
SIDING

AN
EXAMPLE
OF



"RUSTIC"
WESTERN RED CEDAR
BEVEL SIDING

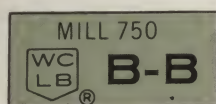
Western Red Cedar Finish

2" & THINNER, 2" & WIDER

Finish is customarily shipped kiln dried (KD) and surfaced 4 sides (S4S). Finish 1" or less in thickness is usually dried as closely as practicable to an average moisture content of 10% or less. 1¼", 1½" and 2" Finish is usually dried as closely as practicable to an average moisture content of 12% or less.

FINISH GRADES

There are three grades of Western red cedar Finish: "B and Better", "C" and "D". If flat grain (FG) or vertical grain (VG) only is desired, it must be so specified. Otherwise, mixed grain (MG) may be shipped at shipper's option.



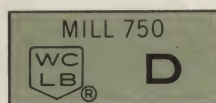
"B AND BETTER" FINISH

Finish of this grade is recommended and widely used for interior and exterior trim and cabinet work with natural, stain or enamel finishes where finest appearance is important. Pieces of this grade are of sound wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics such as occasional sound, tight pin knots. See page 17.



"C" FINISH

Finish of this grade is recommended for interior and exterior trim and cabinet work with natural, stain or enamel finishes where good appearance is important. It is often used in conjunction with "B and Better" Finish. Pieces of this grade are only slightly lower than "B and Better" grade. See page 18.



"D" FINISH

Finish of this grade is recommended for interior and exterior trim and cabinet work where good serviceability is required but appearance is not of primary importance. Pieces of this grade are only slightly lower than "C" grade. See page 19.



STANDARD SIZES OF FINISH, S4S, KD

Although obtainable in widths up to 12", Finish is usually most readily available and economical in widths of 8" or less and in random lengths from 3' to 16'.

FINISH

SIZES		CONVERSION TABLE
NOMINAL	ACTUAL (S4S)	
1 x 2	3/4 x 1-5/8	6,000 lineal ft. per 1,000 FBM
1 x 3	3/4 x 2-5/8	4,000 lineal ft. per 1,000 FBM
1 x 4	3/4 x 3-1/2	3,000 lineal ft. per 1,000 FBM
1 x 5	3/4 x 4-1/2	2,400 lineal ft. per 1,000 FBM
1 x 6	3/4 x 5-1/2	2,000 lineal ft. per 1,000 FBM
1 x 8	3/4 x 7-1/4	1,500 lineal ft. per 1,000 FBM
1 x 10	3/4 x 9-1/4	1,200 lineal ft. per 1,000 FBM
1 x 12	3/4 x 11-1/4	1,000 lineal ft. per 1,000 FBM
1-1/4 x 2	1-1/16 x 1-5/8	4,800 lineal ft. per 1,000 FBM
1-1/4 x 3	1-1/16 x 2-5/8	3,200 lineal ft. per 1,000 FBM
1-1/4 x 4	1-1/16 x 3-1/2	2,400 lineal ft. per 1,000 FBM
1-1/4 x 5	1-1/16 x 4-1/2	1,920 lineal ft. per 1,000 FBM
1-1/4 x 6	1-1/16 x 5-1/2	1,600 lineal ft. per 1,000 FBM
1-1/4 x 8	1-1/16 x 7-1/4	1,200 lineal ft. per 1,000 FBM
1-1/4 x 10	1-1/16 x 9-1/4	960 lineal ft. per 1,000 FBM
1-1/4 x 12	1-1/16 x 11-1/4	800 lineal ft. per 1,000 FBM

(Figures do not allow for waste in cutting)



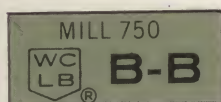
Western Red Cedar Paneling

Paneling is customarily either kiln dried (KD) as closely as practicable to an average moisture content of 10% or less, or air dried (AD) to a moisture content varying from 12% to 18%. Although obtainable in widths up to 12", Paneling is usually most readily available and economical in widths of 4" to 8" and in random lengths from 3' to 16'. These widths are manufactured in nominal 1" and 1/2" thicknesses.

Noted for its beauty and fine finishing qualities, Western red cedar paneling is used widely throughout the home in dens, family rooms, living rooms, bedrooms and kitchens.

PANELING GRADES

There are three grades of Western red cedar Paneling: "B and Better", "C" and "D". If flat grain (FG) or vertical grain (VG) only is desired, it must be so specified. Otherwise mixed grain (MG) may be shipped at shipper's option.



"B AND BETTER" PANELING

Paneling of this grade is recommended for natural, stain or enamel finishes where the finest appearance is important. Pieces of this grade are of sound, all-heart wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics such as occasional small tight pin knots. This grade is similar in appearance to "B and Better" Finish except for being all-heart wood. See page 17.



"C" PANELING

Paneling of this grade is recommended for natural, stain or enamel finishes where good appearance is important. It is often used in conjunction with "B and Better" Paneling. Pieces of this grade are only slightly lower than "B and Better" grade. This grade is similar in appearance to "C" Finish except for being all-heart wood. See page 18.



"D" PANELING

Paneling of this grade is recommended for use where excellent serviceability is required but appearance is not of primary importance. Pieces of this grade are only slightly lower than "C" grade. Similar in appearance to "D" Finish. See page 19.



The rich tones of Western red cedar paneling add friendly distinction to the entry of this lovely home.

A living room in Western red cedar combines harmoniously with furnishings of any era. Here, modern furniture and appointments create an impression of elegant simplicity.



Western Red Cedar Sound Knot Paneling

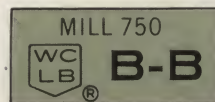
Sound Knot Paneling is customarily either kiln dried (KD) as closely as practicable to an average moisture content of 10% or less, or air dried (AD) to a moisture content varying from 12% to 18%. Although obtainable in widths up to 12", it is usually most readily available and economical in widths of 4" to 8" and in random lengths from 3' to 16'.

The basis of Sound Knot Paneling grades are knots, burls and other natural markings which are sound, of fairly uniform distribution and add to the decorative character of the piece. Knots form the major portion of the markings, and the material is well manufactured.

SOUND KNOT PANELING GRADES

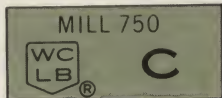
There are two grades of Western red cedar Sound Knot Paneling: "Premium Sound Knot Paneling" and "Sound Knot Paneling".





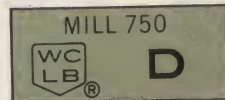
AN EXAMPLE OF
"B AND BETTER"
WESTERN RED CEDAR

AN
EXAMPLE
OF



"C"
WESTERN RED CEDAR

AN EXAMPLE OF



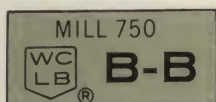
"D"
WESTERN
RED CEDAR

Western Red Cedar Ceiling

Ceiling is customarily surfaced two sides, tongue and groove or shiplap, and usually run to a pattern. It is customarily shipped kiln dried (KD) as closely as practicable to an average moisture content of 10% or less. Ceiling is usually most readily available and economical in random lengths from 3' to 16'.

CEILING GRADES

There are three grades of Ceiling: "B and Better", "C" and "D".



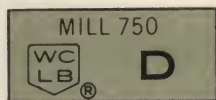
"B AND BETTER" CEILING

Ceiling of this grade is recommended and widely used where finest appearance is important. Pieces of this grade are of sound wood. Most pieces are entirely clear, or have only a few minor and unimportant characteristics, such as an occasional sound, tight pin knot. This grade is similar in appearance to "B and Better" Finish. See page 17.



"C" CEILING

Ceiling of this grade is recommended for use where good appearance is important. It is often used in conjunction with "B and Better" Ceiling. Pieces of this grade are only slightly lower than "B and Better" grade. This grade is similar in appearance to "C" Finish. See page 18.



"D" CEILING

Ceiling of this grade is recommended where excellent serviceability is required but appearance is not of primary importance. Pieces of this grade are only slightly lower than "C" grade. This grade is similar in appearance to "D" Finish. See page 19.



Western Red Cedar Drop Siding and V Rustic

Drop Siding and V Rustic are customarily surfaced two sides, tongue and groove or shiplap, and usually run to a pattern. The reverse side may be partially surfaced or hollow or scratched back. They are customarily shipped kiln dried (KD) as closely as practicable to an average moisture content of 10% or less. Drop Siding and V Rustic are usually most readily available and economical in random lengths from 3' to 16'.

DROP SIDING AND V RUSTIC GRADES

There are three grades of Drop Siding and V Rustic: "C and Better", "D" and "E".

"C AND BETTER" DROP SIDING AND V RUSTIC

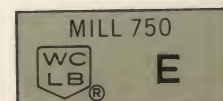
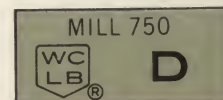
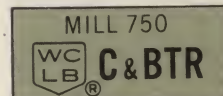
Drop Siding and V Rustic of this grade are recommended and widely used where the finest appearance is required. Pieces of this grade are of sound wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics such as occasional small, sound, tight knots.

"D" DROP SIDING AND V RUSTIC

Drop Siding and V Rustic of this grade are recommended where good serviceability is required but where appearance is not of primary importance. Pieces of this grade are only slightly lower than "C and Better" grade.

"E" DROP SIDING AND V RUSTIC

This grade is recommended for any construction where short pieces can be used, or for temporary construction. Pieces contain characteristics too large or numerous to be accepted in the higher grades. Short lengths of good quality may be obtained from it, however, and its utility value is good.



Western Red Cedar Casing and Base

Casing and Base are customarily run to pattern and kiln dried (KD) as closely as practicable to an average moisture content of 10% or less. Casing and Base are usually most readily available and economical in random lengths from 3' to 16'.

CASING AND BASE GRADES

There are two grades of Western red cedar Casing and Base: "C and Better" and "D".



"C AND BETTER" CASING AND BASE

Casing and Base of this grade are recommended and widely used for interior and exterior trim with natural, stain or enamel finishes where excellent appearance is important. Pieces of this grade are of sound wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics such as an occasional small, sound, tight knot.



"D" CASING AND BASE

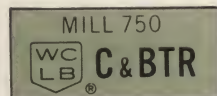
Casing and Base of this grade are recommended for interior and exterior trim where excellent serviceability is required but appearance is not of primary importance. Pieces of this grade are only slightly lower than "C and Better" grade.

WESTERN RED CEDAR FLOORING AND PORCH DECKING

Flooring and Porch Decking are customarily shipped kiln dried (KD). 1" Flooring is usually dried as closely as practicable to an average moisture content of 10% or less. 1 1/4" Flooring is usually dried as closely as practicable to an average moisture content of 12% or less.

FLOORING AND PORCH DECKING GRADES

There are three grades of Flooring and Porch Decking: "C and Better", "D" and "E".



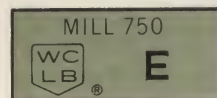
"C AND BETTER" FLOORING AND PORCH DECKING

Flooring and Porch Decking of this grade are recommended and widely used where a combination of fine appearance and good resistance to wear is required. Pieces of this grade are of sound wood. Most pieces are entirely clear or have only a few minor and unimportant characteristics such as occasional small, sound, tight knots.



"D" FLOORING AND PORCH DECKING

Flooring and Porch Decking of this grade are recommended for use where good resistance to wear is desirable but where appearance is not of primary importance. Pieces of this grade are only slightly lower than "C and Better" grade.



"E" FLOORING AND PORCH DECKING

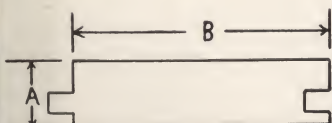
This grade is recommended for subfloors, sheathing, lining of clothes closets and similar uses. Pieces contain characteristics too large or numerous to be accepted in the higher grades. Short lengths of good quality may be obtained from it, however, and its utility value is good.

STANDARD SIZES OF FLOORING AND PORCH DECKING

Flooring and Porch Decking are usually bundled at the mill for shipment and sale. Lengths of pieces range from 3' to 16' or longer.

FLOORING AND PORCH DECKING

SIZES		CONVERSION TABLE
NOMINAL	ACTUAL	
	A B	
1 x 3	25/32 x 2-3/8	1,263 FBM per 1,000 Square feet
1 x 4	25/32 x 3-1/4	1,231 FBM per 1,000 Square feet
1 x 6	25/32 x 5-3/16	1,157 FBM per 1,000 Square feet
1-1/4 x 3	1-1/16 x 2-3/8	1,579 FBM per 1,000 Square feet
1-1/4 x 4	1-1/16 x 3-1/4	1,538 FBM per 1,000 Square feet



Western Red Cedar Board and Batten Siding

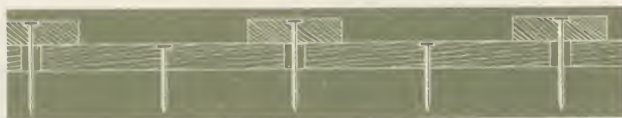
Western red cedar is one of the most popular species of lumber available for Board and Batten Siding. It is easy to apply and, due to its durability and unusually good dimensional stability, will remain flat and weatherproof even after many years of exposure to the weather. Standard sizes of lumber, arranged in various combinations, provide striking and pleasing effects.

GRADES

The Finish grades, described on pages 12 and 13, are usually specified for highest quality residential and commercial buildings, but good results are often obtained with the Board grades which are described on pages 24 and 25. Although S4S lumber is sometimes used, Boards and Battens are usually surfaced one side (S1S) and applied with the rough side out.

BOARD AND BATTEN APPLICATION

One 8d rust-resistant siding nail or casing nail is driven near the center of each board at each bearing. Boards are spaced about $\frac{1}{2}$ " apart, and battens are nailed with one 10d rust-resistant siding nail or casing nail at each bearing, driven through the space between boards. Battens should extend at least 1" over the edge of each board.



BATTEN AND BOARD APPLICATION

Battens are applied first. They are spaced so that the boards will extend at least $1\frac{1}{2}$ " over the edge of each batten. Battens are nailed with one 8d rust-resistant siding nail or casing nail near the center of the batten at each bearing. Outer boards are nailed with two 10d rust-resistant siding nails or casing nails at each bearing driven so the shank will clear edge of batten.



BOARD AND BOARD APPLICATION

Underboards are applied first, using one 8d rust-resistant siding nail or casing nail near the center of the boards at each bearing. The underboards are spaced so that the outer boards will cover their edges at least $1\frac{1}{2}$ ". Outer boards are nailed with two 10d rust-resistant siding nails or casing nails at each bearing, driven so the shank will clear edge of the underboard.



Western Red Cedar Boards

ROUGH OR SURFACED—Shiplap or tongue and groove. Western red cedar Boards are usually of nominal 1" thickness surfaced to $\frac{3}{4}$ ". When seasoned, Western red cedar Boards are dried as closely as practicable to an average moisture content of approximately 19% or less.

GRADES

There are five grades of Western red cedar Boards: "Select Merchantable", "Construction", "Standard", "Utility" and "Economy".



"SELECT MERCHANTABLE" BOARDS

Lumber of this grade is recommended for high class construction and for exposed interior and exterior use. Pieces are graded primarily for serviceability, but are usually of fine appearance. Pieces of this grade are of sound wood and free from wane on the face. This grade is free from knot holes. Page 26 shows an example of "Select Merchantable" Boards.



"CONSTRUCTION" BOARDS

Lumber of this grade is recommended and widely used for high quality construction, including sub-floors, roof and wall sheathing, concrete forms and similar types of construction. Where they occur, characteristics are limited to assure a high degree of serviceability. Page 27 shows an example of "Construction" Boards.



"STANDARD" BOARDS

Lumber of this grade is recommended and usually used in conjunction with "Construction" Boards for sub-floors, roof and wall sheathing, rough concrete form work and similar purposes. As in the "Construction" grade, characteristics are limited to assure a high degree of serviceability. Page 28 shows an example of "Standard" Boards.



"UTILITY" BOARDS

As the name implies, this is a grade which is selected for utility rather than appearance. It gives excellent service in roof and wall sheathing, sub-floors, rough concrete forms—wherever boards are required. Page 29 shows an example of "Utility" Boards.



"ECONOMY" BOARDS

Lumber of this grade is suitable for low grade sheathing, crating, bracing and similar uses. It is frequently used in temporary construction. Short lengths of high grade material may be obtained from this grade by cutting. It is permissible at the shipper's option to ship "Economy" Boards in mixed West Coast species. On any order calling for one of these species, any combination may be shipped unless the order specifically excludes the other species.



STANDARD SIZES OF BOARDS, S4S, S/L AND CM

Boards are usually most readily available and economical in widths of 4" to 8" and in random lengths of 6' to 16'.

BOARDS

	SIZES		CONVERSION TABLE
	NOMINAL	ACTUAL	
Surfaced 4 sides (S4S)	1 x 2	3/4 x 1-5/8	1,231 FBM per 1,000 Square feet
	1 x 3	3/4 x 2-5/8	1,143 FBM per 1,000 Square feet
	1 x 4	3/4 x 3-5/8	1,104 FBM per 1,000 Square feet
	1 x 6	3/4 x 5-1/2	1,091 FBM per 1,000 Square feet
	1 x 8	3/4 x 7-1/2	1,067 FBM per 1,000 Square feet
	1 x 10	3/4 x 9-1/2	1,053 FBM per 1,000 Square feet
	1 x 12	3/4 x 11-1/2	1,044 FBM per 1,000 Square feet
Shiplap (S/L)	1 x 6	3/4 x 5-1/8 face	1,171 FBM per 1,000 Square feet
	1 x 8	3/4 x 7-1/8 face	1,123 FBM per 1,000 Square feet
	1 x 10	3/4 x 9-1/8 face	1,096 FBM per 1,000 Square feet
Center Matched (CM)	1 x 6	3/4 x 5-1/4 face*	1,143 FBM per 1,000 Square feet
	1 x 8	3/4 x 7-1/4 face†	1,103 FBM per 1,000 Square feet

*5-3/16" Seasoned

†7" Seasoned

(Figures do not allow for waste in cutting)



AN EXAMPLE OF



"SELECT
MERCHANTABLE"
WESTERN
RED CEDAR
BOARDS

AN
EXAMPLE
OF



"CONSTRUCTION"
WESTERN RED CEDAR
BOARDS

AN EXAMPLE OF



"STANDARD"
WESTERN
RED CEDAR
BOARDS

AN
EXAMPLE
OF



"UTILITY"
WESTERN RED CEDAR
BOARDS

Western Red Cedar Dimension

LIGHT FRAMING: Rough or Surfaced, 2" to 4" thick, 2" to 4" wide.

JOISTS AND PLANKS: Rough or Surfaced, 2" to 4" thick, 3" and wider.

When seasoned, Western red cedar Dimension is dried as closely as practicable to an average moisture content of 19% or less. Lumber over 2" in thickness is rarely shipped seasoned and any seasoning is subject to special agreement.

Western red cedar is widely used as posts, particularly in the 4" x 4" size, because of its high durability under severe exposure conditions.

DIMENSION GRADES

There are five grades of Western red cedar Dimension: "Select Merchantable", "Construction", "Standard", "Utility" and "Economy".



"SELECT MERCHANTABLE" DIMENSION

Lumber of this grade is recommended for framing, joists and planks in construction where fine appearance, strength and high durability are factors.



"CONSTRUCTION" DIMENSION

Lumber of this grade is in demand because of its good strength and appearance. In these respects it ranks only slightly below the "Select Merchantable" grade, and is recommended for similar uses wherever appearance is a less exacting factor but good strength and high durability are required.



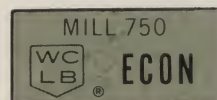
"STANDARD" DIMENSION

Lumber of this grade is recommended and usually used in conjunction with "Construction" Dimension for all the purposes served by the higher grades of the same sizes when somewhat lower strength is suitable and appearance is not a primary consideration. As in the "Construction" grade, characteristics are limited to assure a high degree of serviceability.



"UTILITY" DIMENSION

Lumber of this grade is recommended and widely used for joists and rafters in limited spans, for studs and framing in light construction, and in other places where a combination of utility and economy is desirable. Where they occur, the natural characteristics of lumber are so limited that each piece of this grade may be used in the form in which it is shipped.



"ECONOMY" DIMENSION

Lumber of this grade is suitable for crating, bracing, dunnage, and temporary construction. Short lengths of higher grade material may be obtained from this grade by cutting. All characteristics which do not interfere with use of the piece full length are permitted. It is permissible at the shipper's option to ship "Economy" Dimension in mixed West Coast species. On any order calling for one of these species, any combination may be shipped unless the order specifically excludes the other species.

STANDARD SIZES OF DIMENSION S4S

Dimension is usually most readily available and economical in random lengths of 6' to 16' or 6' to 20'.

DIMENSION

	SIZES		CONVERSION TABLE
	NOMINAL	ACTUAL S4S	
Surfaced 4 Sides (S4S)	2 x 2	1-5/8 x 1-5/8	3,000 lineal ft. per 1,000 FBM
	2 x 3	1-5/8 x 2-5/8	2,000 lineal ft. per 1,000 FBM
	2 x 4	1-5/8 x 3-5/8	1,500 lineal ft. per 1,000 FBM
	2 x 6	1-5/8 x 5-1/2	1,000 lineal ft. per 1,000 FBM
	2 x 8	1-5/8 x 7-1/2	750 lineal ft. per 1,000 FBM
	2 x 10	1-5/8 x 9-1/2	600 lineal ft. per 1,000 FBM
	2 x 12	1-5/8 x 11-1/2	500 lineal ft. per 1,000 FBM
	3 x 3	2-5/8 x 2-5/8	1,333 lineal ft. per 1,000 FBM
	3 x 4	2-5/8 x 3-5/8	1,000 lineal ft. per 1,000 FBM
	3 x 6	2-5/8 x 5-1/2	667 lineal ft. per 1,000 FBM
	3 x 8	2-5/8 x 7-1/2	500 lineal ft. per 1,000 FBM
	3 x 10	2-5/8 x 9-1/2	400 lineal ft. per 1,000 FBM
	3 x 12	2-5/8 x 11-1/2	333 lineal ft. per 1,000 FBM
	4 x 4	3-5/8 x 3-5/8	750 lineal ft. per 1,000 FBM
	4 x 6	3-5/8 x 5-1/2	500 lineal ft. per 1,000 FBM
	4 x 8	3-5/8 x 7-1/2	375 lineal ft. per 1,000 FBM
	4 x 10	3-5/8 x 9-1/2	300 lineal ft. per 1,000 FBM
	4 x 12	3-5/8 x 11-1/2	250 lineal ft. per 1,000 FBM

(Figures do not allow for waste in cutting)

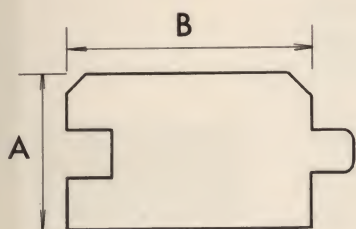


Western Red Cedar Roof Decking

Roof Decking is customarily surfaced two sides, tongue and groove, and usually run to a V Joint pattern, Acoustical pattern or combination of the two. When seasoned, Roof Decking 2" thick is dried as closely as practicable to an average moisture content of 19% or less. Seasoning of lumber over 2" in thickness is subject to special agreement.

Western red cedar Roof Decking is customarily graded under the rules covering Dimension. Pages 30 and 31 give a description of the Dimension grades.

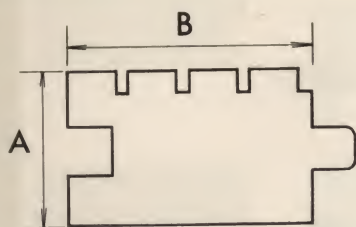
Roof Decking is usually most readily available and economical in random lengths of 6' to 16' or 6' to 20'.



V JOINT

ROOF DECKING

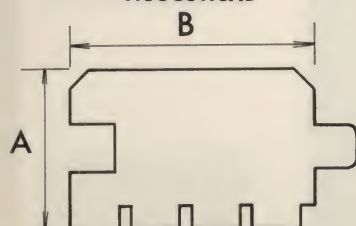
SIZES		CONVERSION TABLE
NOMINAL	ACTUAL	
	A B	
2 x 6	1-5/8 x 5 face	2,400 FBM per 1,000 Square feet
2 x 8	1-5/8 x 7 face	2,286 FBM per 1,000 Square feet
3 x 6	2-5/8 x 5 face	3,600 FBM per 1,000 Square feet
3 x 8	2-5/8 x 7 face	3,429 FBM per 1,000 Square feet



ACOUSTICAL
AND
COMBINATION

SIZES		CONVERSION TABLE
NOMINAL	ACTUAL	
	A B	
2 x 6	1-5/8 x 5 face	2,400 FBM per 1,000 Square feet
2 x 8	1-5/8 x 6-7/8 face	2,327 FBM per 1,000 Square feet
3 x 6	2-5/8 x 5 face	3,600 FBM per 1,000 Square feet
3 x 8	2-5/8 x 6-7/8 face	3,491 FBM per 1,000 Square feet

(Figures do not allow for waste in cutting)



COMBINATION

DOUBLE TONGUE and groove roof decking in 3" and 4" thicknesses is popular in some areas. It is installed by spiking each course to preceding courses at regular intervals and also toenailing at each beam. Pieces are sometimes pre-drilled to insure proper spacing of spikes and to facilitate installation. The double tongue and groove pattern dimensions of one manufacturer may vary slightly from those of another. It is well to check the manufacturer's recommendations on quantity estimation and roof deck installation when the use of this item is contemplated.

CONDENSATION CONTROL. Where there is a combination of warmth and high humidity inside and low temperature outside a building, the moisture vapor inside tends to move outward through walls and ceilings. In extreme cases a vapor-barrier and 1" rigid insulation should be placed above the deck to prevent condensation on top of the decking. This is purely a moisture control provision since Western red cedar is a very good insulating material and the decking itself, especially if 3" or 4" thick, is adequate where thermal insulation is the only consideration.



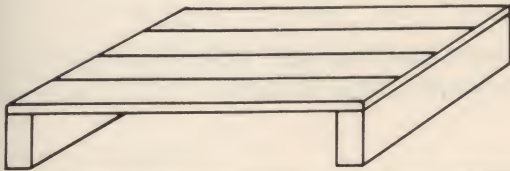
MAXIMUM SPANS FOR WESTERN RED CEDAR ROOF DECKING

as determined by allowable unit stress in bending and maximum deflection of 1/240th of the span length.

Subject to local building codes, these spans are suitable for nominal 6" and wider material.

SINGLE SPAN	NOMINAL THICKNESS	GRADE	MAXIMUM SPANS LIVE LOAD (LBS. PER SQ. FT.)			
			20	30	40	50
	2"	Select Merch.	8'-1"	7'-1"	6'-5"	5'-11"
	3"	Select Merch.	13'-0"	11'-4"	10'-4"	9'-7"
	4"	Select Merch.	17'-11"	15'-8"	14'-3"	13'-1"
	2"	Construction	8'-1"	7'-1"	6'-5"	5'-11"
	3"	Construction	13'-0"	11'-4"	10'-4"	9'-7"
	4"	Construction	17'-11"	15'-8"	14'-3"	13'-1"
	2"	Standard	7'-5"	6'-5"	5'-8"	5'-2"
	3"	Standard	11'-7"	10'-1"	9'-1"	8'-3"
	4"	Standard	15'-7"	13'-8"	12'-4"	11'-3"

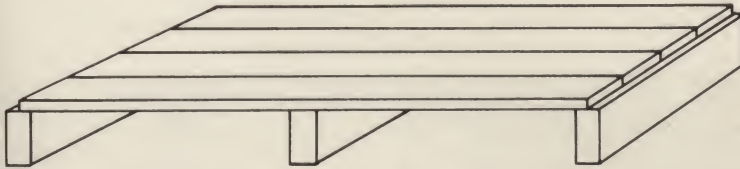
Note: Spans include dead load of decking and 3-ply built-up roofing with gravel topping.



SINGLE SPAN

2 SPAN CONTINUOUS	NOMINAL THICKNESS	GRADE	MAXIMUM SPANS LIVE LOAD (LBS. PER SQ. FT.)			
			20	30	40	50
	2"	Select Merch.	10'-7"	9'-7"	8'-6"	7'-9"
	3"	Select Merch.	17'-4"	15'-1"	13'-5"	12'-4"
	4"	Select Merch.	23'-3"	20'-4"	18'-4"	16'-9"
	2"	Construction	10'-2"	8'-10"	7'-10"	7'-2"
	3"	Construction	16'-0"	13'-11"	12'-5"	11'-4"
	4"	Construction	21'-5"	18'-9"	16'-10"	13'-1"
	2"	Standard	7'-5"	6'-5"	5'-8"	5'-2"
	3"	Standard	11'-7"	10'-1"	9'-1"	8'-3"
	4"	Standard	15'-7"	13'-8"	12'-4"	11'-3"

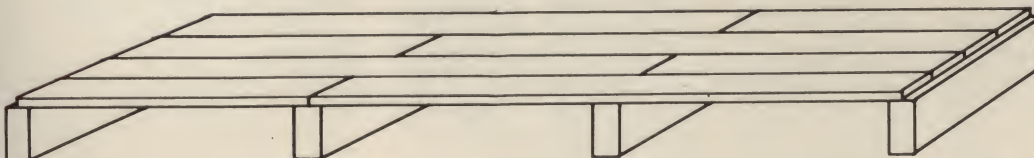
Note: Spans include dead load of decking and 3-ply built-up roofing with gravel topping.



2 SPAN
CONTINUOUS

JOINTS STAGGERED	NOMINAL THICKNESS	GRADE	MAXIMUM SPANS LIVE LOAD (LBS. PER SQ. FT.)			
			20	30	40	50
	2"	Select Merch.	9'-8"	8'-6"	7'-8"	7'-1"
	3"	Select Merch.	15'-6"	13'-6"	12'-4"	11'-5"
	4"	Select Merch.	21'-5"	18'-9"	17'-0"	15'-8"
	2"	Construction	9'-8"	8'-6"	7'-8"	7'-1"
	3"	Construction	15'-6"	13'-6"	12'-4"	11'-4"
	4"	Construction	21'-5"	18'-9"	16'-10"	13'-1"
	2"	Standard	7'-5"	6'-5"	5'-8"	5'-2"
	3"	Standard	11'-7"	10'-1"	9'-1"	8'-3"
	4"	Standard	15'-7"	13'-8"	12'-4"	11'-3"

Note: Spans include dead load of decking and 3-ply built-up roofing with gravel topping.



JOINTS
STAGGERED

Western Red Cedar Posts and Timbers

ROUGH OR SURFACED, 5" x 5" and larger. Western red cedar Posts and Timbers are not usually carried in stock at retail yards but they may be obtained by retail dealers everywhere. If the use of Posts and Timbers in a structure is contemplated, they should be ordered 30 to 60 days before they are needed to permit sufficient time for shipment from the mill or distribution yard.

There are four grades of Western red cedar Posts and Timbers: "Select Merchantable", "Construction", "Standard" and "Utility".



"SELECT MERCHANTABLE" POSTS AND TIMBERS

Timbers of this grade are used for general timbering purposes where high durability and the finest appearance are demanded.



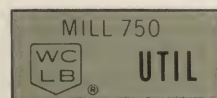
"CONSTRUCTION" POSTS AND TIMBERS

Timbers of this grade rank only slightly below the "Select Merchantable" grade in strength and appearance, and are recommended for similar uses whenever high durability is necessary but appearance is a less exacting factor.



"STANDARD" POSTS AND TIMBERS

Timbers of this grade are recommended for general construction. Where they occur, the natural characteristics of lumber are so limited that each piece of this grade may be used in the form in which it is shipped.



"UTILITY" POSTS AND TIMBERS

Timbers of this grade are recommended for rough general construction. Where they occur, the natural characteristics of lumber are so limited that each piece of this grade may be used in the form in which it is shipped.



Special purpose grades of Western Red Cedar

MOULDINGS, K.D.

There is only one grade of Western red cedar Mouldings: "Mouldings". Standard lengths of mouldings are 4' to 16' or longer.

PICKETS, K.D. or Unseasoned

There are two grades of Western red cedar Pickets: "No. 1" and "No. 2". Standard sizes of Pickets are:

1-1/4" square.....	S4S to 1-1/16" x 1-1/16"
1-1/2" square.....	S4S to 1-5/16" x 1-5/16"
1" x 3" flat.....	S4S to 3/4" x 2-1/2"

LATH, Seasoned or Unseasoned

There are two grades of Lath: "No. 1" and "No. 2". Standard sizes of Lath are:

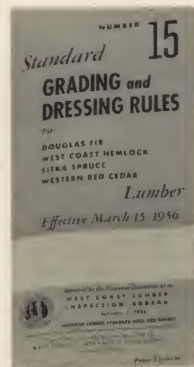
3 pieces to 1".....	in thickness
1-1/2" or 1-5/8".....	in width

TANK STOCK

There is only one grade of Western red cedar Tank Stock: "Tank Stock".

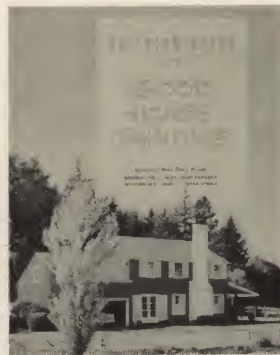


More information about Western Red Cedar grades and uses



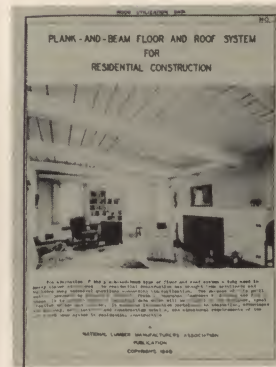
GRADING AND DRESSING RULES NO. 15

338 pages, 3½" x 6½". Gives the official rules for grading and dressing Western red cedar, Douglas fir, West Coast hemlock and Sitka spruce and contains detailed explanation of characteristics permitted in each grade. Single copies free from the West Coast Lumber Inspection Bureau, 1410 S.W. Morrison Street, Portland 5, Oregon.



BUILDING GUIDE FOR GOOD HOUSE PAINTING

12 pages, 8½" x 11". Contains information and illustrations on good building practices to avoid the difficulties caused by excessive moisture in houses. Free from the West Coast Lumbermen's Association, 1410 S.W. Morrison Street, Portland 5, Oregon.



PLANK-AND-BEAM FLOOR AND ROOF SYSTEM FOR RESIDENTIAL CONSTRUCTION

16 pages, 8½" x 11". Contains diagrams, line drawings and photographs of the plank-and-beam system with tables of plank spans and beam spans. Free from the National Lumber Manufacturers Association, 1319 18th Street, N.W., Washington 6, D. C.



WOOD ROOF DECKS

32 pages, 8½" x 11". Describes the advantages of wood roof decks and gives helpful design information. 35¢ per single copy and 30¢ each when purchased in amounts of 25 or more from the National Lumber Manufacturer's Association, 1319 18th Street, N.W., Washington 6, D. C.

For more information or additional copies of this booklet write to:

WEST COAST LUMBERMEN'S ASSOCIATION
1410 S.W. Morrison Street • Portland 5, Oregon

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